

## AMENDMENTS TO THE CLAIMS:

The following is the status of the claims of the above-captioned application, as amended.

Claim 1. (Currently amended) A method for ~~of~~ fluorescence analysis comprising:

~~obtaining data on emitted light from a first granular composition comprising a core and a layer of purified enzyme, the first granular composition having known quality parameters;~~

~~illuminating a second granular composition comprising a core and a layer of purified biologically active compound enzyme with light capable of fluorescence excitation of a fluorescent marker comprised in the second granular composition;~~

~~detecting light emitted from the fluorescent marker; and;~~

~~predicting the amount of fluorescent marker in the second granular composition with the amount of emitted light by comparing the amount of emitted light from the granular composition fluorescent marker with the data on emitted light from a granular composition of known properties.~~

Claim 2. (Currently amended) The method of claim 1, wherein the second granular composition is illuminated with a light source producing ultraviolet light having wavelengths between 10-380 nm.

Claim 3. (Original) The method of claim 2, wherein the ultraviolet light consist of 1-10 discrete monochromatic wavelengths.

Claim 4. (Previously presented) The method of claim 3, wherein the ultraviolet light consist of one discrete monochromatic wavelength.

Claim 5. (Previously presented) The method of claim 1, wherein the detecting of light emitted from the fluorescent marker consists of detecting emitted light of 1-10 discrete monochromatic wavelengths.

Claim 6. (Currently amended) The method of claim 5, wherein the fluorescent marker is the peptide, protein, or enzyme ~~biologically active compound~~ and the detecting of light emitted from the fluorescent marker consists of detecting emitted light of one discrete

monochromatic wavelength.

Claim 7. (Original) The method of claim 1, wherein the detecting is made with at least one detector capable of converting the emitted light into an electronic signal.

Claim 8. (Original) The method of claim 7, wherein the detecting is made with a CCD or an ICCD camera capable of converting the emitted light into a digital two-dimensional image.

Claim 9. (Original) The method of claim 8, wherein the detecting is made with at least two CCD or ICCD cameras capable of converting the emitted light into a digital two dimensional image.

Claim 10. (Currently amended) The method of claim 1, wherein the ~~correlation step of predicting is conducted by~~ includes comparison of ~~comparing~~ light emitted from the ~~particulate second granular composition with to~~ light emitted from a ~~particulate~~ the first granular composition with known amounts of fluorescent marker.

Claim 11. (Currently amended) The method of claim 10, wherein the ~~correlation step of predicting~~ is made in real time.

Claim 12. (Currently amended) The method of claim 1, wherein the ~~biologically active compound~~ enzyme ~~is selected from~~ comprises bio-catalysts, or therapeutic agents, herbicides, pesticides and fungicides.

Claim 13. (Canceled)

Claim 14. (Currently amended) The method of claim ~~13~~ 1, wherein the ~~biologically active compound~~ enzyme ~~is a hydrolase or oxidoreductase~~ is an enzyme, particularly a selected from hydrolases and oxidoreductases.

Claim 15. (Currently amended) The method of claim 1, wherein the ~~first and second granular composition~~ compositions further ~~comprises~~ comprise auxiliary granulation agents.

Claim 16. (Currently amended) The method of claim 15, wherein the auxiliary granulation agents ~~are selected from~~comprise fiber materials, binders, fillers, liquid agents, enzyme stabilizers, suspension agents, cross linking agents, mediators ~~and/or~~, solvents, and combinations thereof.

Claim 17. (Previously presented) The method of claim 16, wherein the fluorescent marker is an auxiliary granulation agent and the detecting of light emitted from the fluorescent marker consists of detecting emitted light of one discrete monochromatic wavelength.

Claim 18. (Currently amended) The method of claim 1, wherein the first and second granules granular compositions ~~comprises a core wherein the an~~ biologically active ~~compound enzyme layer~~ is intimately mixed with auxiliary granulation agents.

Claim 19. (Currently amended) The method of claim 1, wherein the granules purified enzyme layer of the second granular composition is ~~comprise a core particle coated with a a homogenous substantially continuous layer of purified enzyme disposed upon a core comprising the biologically active compound.~~

Claim 20. (Currently amended) The method of claim 1, wherein the first and second granular composition granules ~~have an average size between 20-2000 µm.~~

Claims 21-27 (Canceled)

Claim 28. (Withdrawn) A granulation or coating apparatus comprising

- (a) a granulation or coating device comprising at least one chamber for processing material into granules or coated granules,
- (b) an optical arrangement for performing fluorescence analysis comprising a light source for illumination of granules being processed, at least one detector capable of detecting light emitted from the granules being processed, means for projecting illuminating light onto a portion of the granules being processed, means for projecting light emitted from illuminated granules to the detector and at least one filtering device for filtering light.

Claim 29-43 (Canceled)

Claim 44. (Currently amended) A method for determining the quality parameter of an unknown granular composition comprising a purified enzyme, comprising the steps of:

- a) providing a calibration model by illuminating a granular composition comprising a purified enzyme layer having a known quality parameter with light capable of fluorescence excitation of a fluorescent marker comprised in the granular composition, recording one or more images of the light emitted from the granular composition of a known quality and subjecting recorded images to data processing to form a calibration model,
- b) illuminating an unknown granular composition comprising a purified enzyme layer with light capable of fluorescence excitation of a fluorescent marker comprised in the granular composition, recording at least one image of the light emitted from the unknown granular composition,
- c) comparing at least one recorded or electronic image of the unknown granular composition with the calibration model; and
- d) estimating the quality parameter of the unknown granular composition.

Claim 45. (Canceled)

Claim 46. (Canceled)

Claim 47. (New) The method of claim 44, wherein the unknown granular composition comprises a core and a homogenous substantially continuous layer of purified enzyme disposed upon the core.

Claim 48 (New) The method of claim 1 wherein the step of predicting the amount of fluorescent marker in the second granular composition comprises converting the light emitted from the fluorescent marker into an electronic signal and comparing the electronic signal to the data.